

Latest cold nuclear matter constraints from heavy quarkonia suppression in $d+\text{Au}$ collisions at RHIC from the PHENIX collaboration

Relating the measured suppression of J/ψ production in relativistic heavy ion (A+A) collisions to the possible formation of a Quark Gluon Plasma (QGP) requires that one first understands all effects that alter this production in the absence of a QGP. These so called *cold nuclear matter* effects have multiple origins such as: modification of the parton distribution functions (e.g. gluon saturation), as well as initial and final state interactions of the charmonia or its precursors with the surrounding matter. They can be measured by studying the J/ψ production in $p+A$ or $d+A$ collisions. They must then be extrapolated to A+A collisions and subtracted from the measured suppression in such collisions. This contribution presents the latest extraction of these CNM effects from PHENIX data acquired during the 2008 $d+\text{Au}$ RHIC run at a center of mass energy per nucleon-nucleon collision $\sqrt{s_{\text{NN}}} = 200$ GeV, which represents a factor of 30 increase in integrated luminosity with respect to published results. Recent results on Upsilon cold nuclear matter effects, measured using the same data set, will also be discussed.